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                      ***
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***Files 154&155, MEDLINE(R)
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FILES RENAMED
***File 321, PLASPEC now known as Plastic Properties Database
                    ***
FILES REMOVED
***File 388,PEDS: Defense Program Summaries
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       20feb09 09:27:15 User276653 Session D153.1
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     $0.02  TELNET
     $0.02  Estimated cost this search
     $0.02  Estimated total session cost   0.277 DialUnits


SYSTEM:OS  - DIALOG OneSearch
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  File  28:Oceanic Abstracts 1966-2009/Apr
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*File  71: The file has been reloaded. Accession numbers
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  File  73:EMBASE 1974-2009/Feb 19
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temporarily not updating.
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         (c) format only 2009 Dialog
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  File 155:MEDLINE(R) 1950-2009/Feb 17
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for information.
  File 164:Allied & Complementary Medicine 1984-2009/Jan
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Ref    Items  Index-term
E1         1  AU=FERREDE, W.
E2         1  AU=FERREDO M
E3        11 *AU=FERREE
E4        15  AU=FERREE A
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E7         3  AU=FERREE A.W.
E8         9  AU=FERREE ANDREW
E9         3  AU=FERREE ANDREW W
E10        1  AU=FERREE AW
E11        6  AU=FERREE B
E12       22  AU=FERREE B A

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         1456691  NUCLEUS
      S1       3  AU='FERREE B A' AND NUCLEUS
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 1/9,K/1     (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0320853  DBR Accession No.: 2003-21993    PATENT
Preserving phenotype of cultured cell such as fibrocytes, useful as tissue
    transplants comprises, culturing cells with extracellular matrix of
    annulus fibrosis harvested from living or recently deceased human or
```

animal - fibrocyte cell culture for transplantation, cell therapy or gene therapy
AUTHOR: FERREE B A
PATENT ASSIGNEE: FERREE B A 2003
PATENT NUMBER: US 20030026788 PATENT DATE: 20030206 WPI ACCESSION NO.: 2003-596337 (200356)
PRIORITY APPLIC. NO.: US 253211 APPLIC. DATE: 20020924
NATIONAL APPLIC. NO.: US 253211 APPLIC. DATE: 20020924
LANGUAGE: English
ABSTRACT: DERWENT ABSTRACT: NOVELTY - Preserving (M) the phenotype of a cultured cell, involves harvesting cells to be cultured from a suitable donor, harvesting the extracellular matrix (ECM) of the annulus fibrosis from a living or recently deceased human or animal, and culturing the cells along with portions of the ECM to preserve the phenotype of the cultured cell. BIOTECHNOLOGY - Preferred Method: (M) further comprises transplanting the cultured cells into or onto a vertebral disc. (M) further comprises adding one or more therapeutic substances (including culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications or immunosuppressive medications) to the cell culture. ACTIVITY - Antiinflammatory; Immunosuppressive; Hepatotropic; Nephrotropic; Cardiant. No supporting data provided. MECHANISM OF ACTION - Gene therapy; Cell therapy. USE - (M) is useful for preserving the phenotype of a cultured cell such as fibrocytes, chondrocytes or nucleus pulposis cells (claimed). The cultured cell is useful in annulus fibrosis augmentation and/or transplantation, for treating intervertebral disc, or other tissues of the body such as meniscus of the knee, or to repair or replace other tissues or organs of the body such as the pancreas, liver, kidney, or heart. (3 pages)
DESCRIPTORS: human fibrocyte, chondrocyte, nucleus pulposis cell culture, phenotype evaluation, preservation, extracellular matrix, appl. pancreas, liver, kidney, heart transplantation, cell therapy, gene therapy, vulnerary act. animal mammal tissue engineering (22, 37)
SECTION: THERAPEUTICS-Tissue Culture/Engineering-GENETIC TECHNIQUES and APPLICATIONS-Gene Expression Techniques and Analysis; DISEASE-Cardiovascular-DISEASE-Liver; DISEASE-Kidney-DISEASE-Other Diseases; THERAPEUTICS-Gene Therapy

AUTHOR: FERREE B A
...ABSTRACT: is useful for preserving the phenotype of a cultured cell such as fibrocytes, chondrocytes or nucleus pulposis cells (claimed). The cultured cell is useful in annulus fibrosis augmentation and/or transplantation...
DESCRIPTORS: human fibrocyte, chondrocyte, nucleus pulposis cell culture, phenotype evaluation, preservation, extracellular matrix, appl. pancreas, liver, kidney, heart transplantation, cell...

1/9,K/2 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0293597 DBR Accession No.: 2002-15444 PATENT
Treating diseased/traumatized intervertebral disc, comprises harvesting nucleus pulposus cells of healthy disc and extracellular matrix from deceased animal, combining them and transplanting engineered pulposus into disc - transplantation and tissue engineering for disc disease

therapy
AUTHOR: FERREE B A
PATENT ASSIGNEE: FERREE B A 2002
PATENT NUMBER: US 6352557 PATENT DATE: 20020305 WPI ACCESSION NO.: 2002-314694 (200235)
PRIORITY APPLIC. NO.: US 638727 APPLIC. DATE: 20000814
NATIONAL APPLIC. NO.: US 638727 APPLIC. DATE: 20000814
LANGUAGE: English
ABSTRACT: DERWENT ABSTRACT: NOVELTY - Treating a diseased or traumatized intervertebral disc (D) having a nucleus and annulus fibrosis, comprising harvesting nucleus pulposus (NP) cells, cells that differentiate into NP-like cells or live cells that function like NP cells from a healthy (D), and extracellular matrix (EM) of NP from a recently deceased animal, combining C1 and EM to produce engineered NP (P), and transplanting (P) into (D), is new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) preparing an engineered NP, by harvesting NP cells, cells that differentiate into NP like cells or live cells that function like cells of the NP, from a healthy (D), harvesting EM from a recently deceased human or animal, combining NP and EM to produce an engineered NP, and keeping the engineered NP viable until transplantation or use; and(2) an engineered pulposus (I) prepared by the above method. BIOTECHNOLOGY - Preferred Method: The treatment method further involves morselizing the engineered NP, forming a passageway through the annulus fibrosis, and transplanting the engineered NP into the disc through the passageway. The method further involves adding one or more therapeutic substances to the engineered NP, including culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The harvested cells are kept viable until being placed into the disc to be treated. ACTIVITY - Analgesic. No supporting data is given. MECHANISM OF ACTION - Cell therapy. USE - The method is useful for treating a disease or traumatized intervertebral disc having a nucleus and annulus fibrosis (claimed). Living nucleus pulposus cells combined with nucleus pulposus extracellular matrix restore disc function and eliminate pain in patients with disc disease. ADMINISTRATION - The cells or engineered tissues are administered through any surgical technique including percutaneous or laproscopic approaches, particularly, the engineered tissue is morselized and injected into the disc with a needle and syringe or through a small cannula (claimed). Dosage not specified. ADVANTAGE - The risk for premature wear-out of disc function is minimized. EXAMPLE - None given in the source material.(4 pages)
DESCRIPTORS: deceased, living animal nucleus pulposus differentiation, extracellular matrix, transplantation, appl. tissue engineering, diseased, traumatized nucleus , annulus fibrosis intervertebral disc therapy analgesic (21, 44)
SECTION: THERAPEUTICS-Tissue Culture/Engineering-DISEASE-Other Diseases

Treating diseased/traumatized intervertebral disc, comprises harvesting nucleus pulposus cells of healthy disc and extracellular matrix from deceased animal, combining them and transplanting...
AUTHOR: FERREE B A
ABSTRACT: DERWENT ABSTRACT: NOVELTY - Treating a diseased or traumatized intervertebral disc (D) having a nucleus and annulus fibrosis, comprising harvesting nucleus pulposus (NP) cells, cells that differentiate into NP-like cells or live cells that function...

... USE - The method is useful for treating a disease or traumatized intervertebral disc having a nucleus and annulus fibrosis (claimed). Living nucleus pulposus cells combined with nucleus pulposus extracellular matrix restore disc function and eliminate pain in patients with disc disease. ADMINISTRATION...
DESCRIPTORS: deceased, living animal nucleus pulposus differentiation, extracellular matrix, transplantation, appl. tissue engineering, diseased, traumatized nucleus , annulus fibrosis intervertebral disc therapy analgesic (21, 44)

1/9,K/3 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotech Res.
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0287422 DBR Accession No.: 2002-09269 PATENT
Treating degenerative disc disease by combining living, invertebral disc cells with type-specific collagen-glycosaminoglycan extracellular matrices and transplanting them into a patient to restore disc function and eliminate pain - intervertebral disk cell culture, collagen-glycosaminoglycan extracellular matrix, growth factor and differentiation factor for tissue engineering and disease therapy
AUTHOR: FERREE B A
PATENT ASSIGNEE: FERREE B A 2002
PATENT NUMBER: US 6340369 PATENT DATE: 20020122 WPI ACCESSION NO.: 2002-146856 (200219)
PRIORITY APPLIC. NO.: US 638726 APPLIC. DATE: 20000814
NATIONAL APPLIC. NO.: US 638726 APPLIC. DATE: 20000814
LANGUAGE: English
ABSTRACT: DERWENT ABSTRACT: NOVELTY - Methods for treating diseased or traumatized intervertebral disc (having a nucleus and annulus fibrosis), comprising harvesting and culturing living, invertebral disc cells, combining them with type-specific collagen-glycosaminoglycan extracellular matrices and transplanting them into a patient with disc disease to restore disc function and eliminate pain, are new. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) a method (I) of treating a diseased or traumatized intervertebral disc having a nucleus and annulus fibrosis, comprising: (a) harvesting live, intervertebral disc cells; (b) combining the harvested cells with an analogue of the extracellular matrix to produce an engineered disc tissue; and (c) transplanting the engineered disc tissue into the disc; (2) a method (II) of treating a diseased or traumatized intervertebral disc, comprising: (a) harvesting live cells from a human or animal donor; and (b) transplanting the harvested cells into the disc being treated while the harvested cells are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus fibrosis like cells); (3) an engineered disc tissue (III) prepared via (I) (which further comprises keeping the engineered disc tissue viable until use); (4) a method (IV) of preparing engineered intervertebral disc tissue for subsequent transplantation, comprising: (a) harvesting live cells from a human or animal donor wherein, following transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and (ii) at least some of the cells differentiate into annulus fibrosis like cells; (b) combining the nucleus pulposus like cells with type II

collagen-glycosaminoglycans; and (c) combining the annulus fibrosis like cells with type I collagen-glycosaminoglycans; (5) engineered intervertebral disc tissue (V) prepared according to the method (V); (6) a method (VI) of preparing engineered intervertebral disc tissue, comprising: (a) harvesting live cells from a human or animal donor; and (b) transplanting the harvested cells into the disc being treated while the harvested cells are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus fibrosis like cells; and (c) combining the harvested cells with an analogue of the extracellular matrix; and (7) engineered intervertebral disc tissue (VII) prepared according to the method (VI). BIOTECHNOLOGY - Preferred Methods: In (I) the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) annulus fibrosis cells, precursors of annulus fibrosis cells, or cells capable of differentiating into annulus fibrosis cells and the harvested cells are transplanted into the annulus fibrosis of the disc. The methods (I) and (II) further comprise: (a) morselizing the engineered disc tissue; (b) forming a passageway through the annulus fibrosis; and (c) transplanting the engineered disc tissue into the disc through the passageway. The methods (I) and (II), further comprise adding one or more therapeutic substances to the engineered disc tissue, such as culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The step of transplanting the engineered disc tissue into the disc comprises: (i) injecting the engineered disc tissue into the disc through a needle and syringe or small cannula; and (ii) percutaneously or laparoscopically injecting the engineered disc tissue into the disc being treated. The method (I) further comprises keeping the harvested cells viable until placed into the disc being treated. The analogues of the extracellular matrix in (I) and (II) include collagen-glycosaminoglycans. Method (I) may further comprise keeping the engineered disc tissue viable until use. The method (II) further comprises: (1) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (2) combining the annulus fibrosis like cells with type I collagen-glycosaminoglycans. The method (II) may further comprise: (a) combining the harvested cells with an analogue of the extracellular matrix to create an engineered disc tissue; and (b) transplanting the engineered disc tissue into the disc being treated. The constituents are morselized, and further includes one or more therapeutic substances, such as culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The analogues of the extracellular matrix include collagen-glycosaminoglycans. In method (VI) the therapeutic substances include one or more of the following: culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. Preferred Disc Tissues: For the engineered disc tissue (III), the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) are annulus fibrosis cells, precursors of annulus fibrosis cells, or cells capable of differentiating into annulus fibrosis cells and the harvested cells are transplanted into the annulus fibrosis of

the disc. The intervertebral disc tissue (VI) further comprises one or more therapeutic substances, such as culture media, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications. The intervertebral disc tissue (VII), further includes one or more therapeutic substances. ACTIVITY - Osteopathic. No biological data given. MECHANISM OF ACTION - None given. USE - The methods and disc tissues may be used for the treatment of diseased or traumatized intervertebral discs and degenerative disc diseases. ADMINISTRATION - The cells or engineered tissues may be introduced using any surgical technique, including percutaneous or laparoscopic approaches. As one delivery mechanism, a passageway may be formed through the annulus fibrosis, with the cells or engineered disc tissue being introduced into the disc through the passageway. In particular, the engineered disc tissue may be morselized and injected into the disc with a needle and syringe or through a small cannula. ADVANTAGE - The treatment of degenerative disc disease has previously relied on eliminating the defective disc or disc function. This may be accomplished by fusing the vertebra on either side of the disc. In terms of replacement, most prior-art techniques use synthetic materials to replace the entire disc or a portion of it. Unfortunately, disc replacement using synthetic materials does not restore normal disc shape, physiology, or mechanical properties. Synthetic disc replacements tend to wear out, resulting in premature failure. The problems associated with the wear of prosthetic hip and knees are well known to those skilled in orthopedic surgery. The future of treating degenerative disc disease therefore lies in treatments which preserve disc function. If disc function could be restored with biologic replacement or augmentation, the risk of premature wear out would be minimized, if not eliminated. The methods are used for treating a diseased or traumatized intervertebral discs using natural, engineered tissue as opposed to synthetic materials. Live, intervertebral disc cells are harvested from a patient, cultured, and transplanted while still viable into the affected disc. In the preferred embodiment, the cultured cells are transferred and grown on an analogue of the extracellular matrix to yield an engineered disc tissue. Collagen-glycosaminoglycans preferably provide the extracellular matrix, though existing alternative and yet-to-be-developed analogues may be substituted. Depending upon the target region of the recipient, the cells preferably differentiate into nucleus pulposus like cells, annulus fibrosis like cells, or both. To assist in differentiation, the nucleus pulposus like cells may be combined with type II collagen-glycosaminoglycans, and the annulus fibrosis like cells may be combined with type I collagen-glycosaminoglycans. EXAMPLE - No examples given.(4 pages)

DESCRIPTORS: intervertebral disk cell culture, type-specific collagen-glycosaminoglycan extracellular matrix, nucleus pulposus, annulus fibrosis-like cell differentiation, artificial disk tissue transplantation, growth factor, differentiationfactor, hydrogel, polymer, antibiotic, antiinflammatory, immunosuppressive medication, appl. traumatized intervertebral disk disease therapy, tissue engineering artificial organ osteopathic (21, 31)

SECTION: THERAPEUTICS-Tissue Culture/Engineering-DISEASE-Other Diseases

AUTHOR: FERREE B A

ABSTRACT: DERWENT ABSTRACT: NOVELTY - Methods for treating diseased or traumatized intervertebral disc (having a nucleus and annulus fibrosis), comprising harvesting and culturing living, invertebral disc

cells, combining them with type...

... following: (1) a method (I) of treating a diseased or traumatized intervertebral disc having a nucleus and annulus fibrosis, comprising: (a) harvesting live, intervertebral disc cells; (b) combining the harvested cells...

... are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus...

...or animal donor wherein, following transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and (ii) at least some of the cells differentiate into annulus fibrosis like cells; (b) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (c) combining the annulus fibrosis like...

... are still viable (subsequent to transplantation: (i) at least some of the cells differentiate into nucleus pulposus like cells; and/or (ii) at least some of the cells differentiate into annulus...

... according to the method (VI). BIOTECHNOLOGY - Preferred Methods: In (I) the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) annulus fibrosis cells, precursors of annulus fibrosis cells, or...

... the engineered disc tissue viable until use. The method (II) further comprises: (1) combining the nucleus pulposus like cells with type II collagen-glycosaminoglycans; and (2) combining the annulus fibrosis like...

... medications. Preferred Disc Tissues: For the engineered disc tissue (III), the harvested cells are: (1) nucleus pulposus cells, precursors of nucleus pulposus cells, or cells capable of differentiating into nucleus pulposus cells and the harvested cells are transplanted into the nucleus of the disc; and/or(2) are annulus fibrosis cells, precursors of annulus fibrosis cells...be substituted. Depending upon the target region of the recipient, the cells preferably differentiate into nucleus pulposus like cells, annulus fibrosis like cells, or both. To assist in differentiation, the nucleus pulposus like cells may be combined with type II collagen-glycosaminoglycans, and the annulus fibrosis...

DESCRIPTORS: intervertebral disk cell culture, type-specific collagen-glycosaminoglycan extracellular matrix, nucleus pulposus, annulus fibrosis-like cell differentiation, artificial disk tissue transplantation, growth factor, differentiationfactor, hydrogel, polymer...

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Ref	Items	Index-term
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E2	3	AU=LONNENMANN G.
E3	0	*AU=LONNER
E4	15	AU=LONNER B

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E6       21  AU=LONNER B.
E7        3  AU=LONNER B. S.
E8        4  AU=LONNER B.N.
E9       26  AU=LONNER B.S.
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E11      39  AU=LONNER BARON S
E12       1  AU=LONNER BN

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         1456691  NUCLEUS
      S2       0  AU='LONNER BARON S' AND NUCLEUS
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         7917565  TISSUE
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 3/9,K/1     (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
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  14939066   PASCAL No.: 01-0090200
  Diagnosing spinal osteomyelitis : A comparison of bone and Ga-67
scintigraphy and magnetic resonance imaging
  LOVE Charito; PATEL Mahendra;  LONNER Baron S ; TOMAS Maria B; PALESTRO
Christopher J
  Division of Nuclear Medicine, Long Island Jewish Medical Center, New Hyde
Park, New York, United States; Division of Neuroradiology, Long Island
Jewish Medical Center, New Hyde Park, New York, United States; Department
of Orthopedic Surgery, Long Island Jewish Medical Center, New Hyde Park,
New York, United States
  Journal: Clinical nuclear medicine,  2000, 25 (12) 963-977
  ISSN: 0363-9762  CODEN: CNMEDK  Availability: INIST-16903;
354000093411820020
  No. of Refs.: 19 ref.
  Document Type: P (Serial) ; A (Analytic)
  Country of Publication: United States
  Language: English
  Purpose:  The objective of this investigation was to compare the
accuracies of bone and Ga-67 scintigraphy and magnetic resonance imaging
(MRI) for diagnosing spinal osteomyelitis and to determine the optimal
radionuclide approach to this disorder. Methods: Twenty-two patients, with
24 sites of possible spinal osteomyelitis, who underwent three-phase bone
scintigraphy with SPECT, Ga-67 scintigraphy with SPECT, and MRI with and
without contrast were included in this retrospective review. Bone scans
were interpreted as three-phase studies, delayed planar images alone,
delayed planar plus SPECT, and SPECT alone (to identify uptake patterns).
Sequential bone/ Ga-67 images were interpreted as planar and as SPECT
studies. Planar and SPECT Ga-67 images were also interpreted alone.
Precontrast MRI studies were used to identify osteomyelitis, whereas
postcontrast images were used to identify soft tissue infection. Results:
Eleven sites of spinal osteomyelitis were identified. Tracer uptake in two
contiguous vertebrae, as noted on SPECT, was the most accurate bone scan
criterion for detecting spinal osteomyelitis (71%). SPECT bone/Ga-67 was
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significantly more accurate (92%) than both planar bone/Ga-67 (75%) and bone SPECT (P = 0.15 and P = 0.2, respectively). SPECT Ga-67 was as accurate as SPECT bone/Ga-67 and as sensitive as MRI (91%); the radionuclide study was slightly but not significantly more specific (92% vs. 77%) than MRI. Of 11 sites of extraosseous infection, 10 were identified on MRI, 9 on SPECT Ga-67,7 on planar Ga-67, and none on bone scintigraphy. Conclusions: Spinal osteomyelitis and accompanying soft tissue infection can be diagnosed accurately with a single radionuclide procedure: SPECT Ga-67. This procedure can be used as a reliable alternative when MRI cannot be performed and as an adjunct in patients in whom the diagnosis is uncertain.

English Descriptors: Osteitis; Spine; Diagnosis; Emission tomography; Gallium; Nuclear magnetic resonance imaging; Indication; Comparative study; Human
Broad Descriptors: Diseases of the osteoarticular system; Bone disease; Radionuclide study; Medical imagery; Systeme osteoarticulaire pathologie; Osteopathie; Exploration radioisotopique; Imagerie medicale; Sistema osteoarticular patologia; Osteopatia; Exploracion radioisotopica; Imageneria medical

French Descriptors: Osteite; Rachis; Diagnostic; Tomoscintigraphie; Gallium ; Imagerie RMN; Indication; Etude comparative; Homme

Classification Codes: 002B24B08

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LOVE Charito; PATEL Mahendra; LONNER Baron S ; TOMAS Maria B; PALESTRO Christopher J

... MRI studies were used to identify osteomyelitis, whereas postcontrast images were used to identify soft tissue infection. Results: Eleven sites of spinal osteomyelitis were identified. Tracer uptake in two contiguous vertebrae...

... on planar Ga-67, and none on bone scintigraphy. Conclusions: Spinal osteomyelitis and accompanying soft tissue infection can be diagnosed accurately with a single radionuclide procedure: SPECT Ga-67. This procedure...

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